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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,286	10/31/2003	Edmund J. Ring	58780US002	1619
32692 7590 05/04/2007 3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			EXAMINER FASTOVSKY, LEONID M	
			ART UNIT 3742	PAPER NUMBER
			NOTIFICATION DATE 05/04/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/698,286	Applicant(s) RING, EDMUND J.	
	Examiner Leonid M. Fastovsky	Art Unit 3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 2,5-12,14-18 and 22-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,13,19-21 and 28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-4, 13 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamp in view of Ito et al (5,379,021).

Kamp discloses an inductive heating device comprising a power supply 1 including a work head 4, inductive coils 5,7 configured to couple the power supply 1 to the work head, an inductive coupling assembly including power supply lines 11, a primary coil 24, a secondary coil 13 and an inductive core 12, the power supply 1 being electrically coupled to the primary coil 13, the second coil being electrically coupled to the work head 4, the primary and secondary coils configured to be magnetically coupled through the inductor core 12 when the inductive coils 5, 7 are coupled. Also, the inductor core 12 is attached within and extends from the primary coil 24 and attaches within and extends from the secondary coil 13.

However, Kamp does not disclose a cable assembly, a coupling sleeve and the inductive coupling removably coupling the coils.

Ito discloses a removable inductive coupler comprising a primary coil 6, secondary coils 5 with secondary cores 3 and 4, and an inductive coupling sleeve 2 (col. 3, lines 60-68, col. 4, lines 1-48 and Fig. 1-6).

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It would have been obvious to one having ordinary skill in the art to modify Kamp's invention to replace his power supply lines 11 with a cable assembly, the feature well known in the art, and to include a removable coupler and a sleeve as taught by Ito in order to reduce production costs by allowing easy disassembly of primary and secondary circuits and further to include a protective sleeve as taught by Ito as reasonably pertinent to the particular problem of facilitating the assembly and disassembly of the inductive heating device in accordance with MPEP 2141.01(a), and thus increase utilities of the inductive heating device.

As for claim 13, it would have be obvious to use the teaching of Kamp in view of Ito to use a method of heating a target substrate because they disclose all elements of the invention and capable of so perform.

3. Claim 28 is rejected under 35 U.S.C. 103(a) over Kamp et al in view of Ito.

Kamp discloses an inductive heating device comprising a power supply 1 including a primary coil 24, a cable assembly 11, as disclosed in paragraph 2, having a first end coupled to the second coil 13 and a second end coupled to a work head 4, an inductor core 12, and means 5, 7 for coupling the cable assembly 11 to the power supply such that the inductor core 12 couples between the primary coil 24 and the secondary coil 13. However, Kamp does not disclose the inductive coupling removably coupling the coils and the cable assembly electrically coupled to the working head.

Ito discloses a removable inductive coupler comprising a primary coil 6, secondary coils 5 with secondary cores 3 and 4 (col. 3, lines 60-68, col. 4, lines 1-48 and Fig. 1-6).

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It would have been obvious to one having ordinary skill in the art to modify Kamp's invention connect the second end of his cable assembly to a working head (col. 1, lines 34-48) and to include a removable coupler as taught by Ito in order to increase utilities of the induction device and also to reduce production costs by allowing easy disassembly of primary and secondary circuits.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Response to Arguments

5. Applicant's arguments with respect to claims 1, 3-4,13,19-21 and 28 have been considered but are not persuasive.

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As to applicant arguments about Kamp's power lines not being a cable assembly, it would have been obvious to one having ordinary skill in the art to replace his power lines with a cable assembly as well known in the art.

As to applicant arguments about Ito's reference, it would have been obvious to combine Kamp and Ito inventions since Kamp's replacement of his power lines with the cable assembly make this combination appropriate and feasible.

As to applicant arguments about a secondary winding 13, it has been held that mere duplication of the essential working parts - several winding turns involves only routine skill in the art. *St Regis Paper Co. v. Bemis Co.* 193 USPQ 8.


As to claim 28, it would have been obvious to one having ordinary skill in the art to modify Kamp's invention to connect the second end of his cable assembly to a working head (col. 1, lines 34-48) and to include a removable coupler as taught by Ito in order increase utilities of the induction device and also to reduce production costs by allowing easy disassembly of primary and secondary circuits.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid M Fastovsky whose telephone number is 571-272-4778. The examiner can normally be reached on M-Th. 8.00 am -6.00 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Philip Leung can be reached on 571-272-4782. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Leonid M Fastovsky
Examiner
Art Unit 3742

lmf


PHILIP H. LEUNG
PRIMARY EXAMINER
ART UNIT 3742